

AMENDMENTS TO THE CLAIMS

1. (Original) A method of eliciting a Raman signal from a living cell, or a plurality of living cells, said method comprising irradiating the cell with a laser having a wavelength of 785 ± 60 nm.

2. (Original) A method according to claim 1 comprising irradiating the cell with a laser having a wavelength of 785 ± 20 nm.

3. (Currently Amended) A method according to claim 1 ~~or claim 2~~ wherein the cell is exposed to a total energy of at least about 20 Joules.

4. (Currently Amended) A method according to ~~any preceding~~ claim 1 wherein the cell is exposed to a total energy of at least about 100 Joules.

5. (Currently Amended) A method according to ~~any preceding~~ claim 1 wherein the cell is exposed to a total energy of at least about 200 Joules.

6. (Currently Amended) A method according to ~~any preceding~~ claim 1 wherein the cell is exposed to a total energy of at least 275 Joules.

7. (Currently Amended) A method according to ~~any preceding~~ claim 1 wherein the cell is irradiated at an intensity of 115 ± 50 mW.

8. (Currently Amended) A method according to ~~any one of claims 4 to 6~~ claim 1 wherein the cell is irradiated at an intensity of 120 ± 60 mW.

9. (Currently Amended) A method according to ~~any preceding~~ claim 1 wherein the cell is irradiated for a period of up to 40 minutes.

10. (Currently Amended) A method according to ~~any preceding~~ claim 1 wherein the laser is focussed within the cytoplasm of the cell.

11. (Currently Amended) A method according to ~~any one of claims 1 to 9~~ claim 1 wherein the laser is focussed within the nucleus of the cell.

12. (Currently Amended) A method according to ~~any one of claims 1 to 9~~ claim 1 wherein the laser is focussed within the extracellular matrix.

13. (Currently Amended) A method according to ~~any preceding~~ claim 1 wherein the cell is cultured on a bioinert material.

14. (Original) A method according to claim 13 wherein the bioinert material is poly-L-lysine coated fused silica.

15. (Currently Amended) A method according to ~~any preceding~~ claim 1 wherein the cell is cultured on a bioactive scaffold.

16. (Currently Amended) A method according to ~~any one of claims claim 1 to 12~~ wherein the cell is cultured on an uncoated bioactive glass or a sol-gel derived gel glass.

17. (Original) A method of detecting changes in a living cell or a plurality of living cells, said method comprising the steps of:

- (i) eliciting a Raman signal in accordance with any one of claims 1 to 16; and
- (ii) measuring changes in the Raman signal over a period of time.

18. (Currently Amended) A method according to claim 17 for detecting changes in one of the cell phenotype, induced by a pharmaceutical agent or a cytotoxic agent, protein levels, DNA or RNA levels, the extracellular matrix, the cell cycle.

19. (Original) A method according to claim 17 for monitoring cell growth.

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Currently Amended) A method according to ~~any preceding~~
claim 17 for detecting the cell cycle of a living cell.

25. (Canceled)

26. (Currently Amended) A method according to ~~any preceding~~
claim 17 for detecting the onset of cell death by apoptosis or necrosis.

27. (Canceled)

28. (Cancel)

29. (Cancel)